Hybrid Block Scheduling Evaluation Plan

(revised: November 11 and 16, 2005)

Context:

The Stafford County Public Schools implemented a block scheduling format in three of the division's high schools at the beginning of the 2005-06 school year. The previous year the principals of the three schools provided leadership for investigating scheduling formats that would provide more opportunities for success for its students. The principals and the schools' school improvement committees reviewed the research literature, analyzed data, and assessed the needs of their high school students. The result of this study yielded a format that is largely based on classes of about 90 minutes with modifications for some specialized courses; therefore, this format is considered a hybrid of the alternating (i.e. -A/B) and the semester (i.e. -4x4) block scheduling format. The hybrid format allows students to take advantage of the many positive attributes of the semester block schedule without compromising the year-long integrity of advanced placement and performing arts courses. Many courses offer a credit for a semester of work, but others run the entire year either on the basis of 45 minutes every day of the year or 90 minutes every other day. During the planning year significant attention was given to professional development, and a majority of the teachers received some training on the implementation of the block schedule, most commonly 1-10 hours, with a major emphasis on the use of student-centered instructional strategies.

During the planning year, the principals understood that planning would have to continue during the actual initial year of implementation. As a result, the original block scheduling implementation plan included continued professional development and support for teachers during the first year; as well as an evaluation component that would yield information to make needed alterations, adjustments, and improvements.

Purpose:

Over the past twenty-five years, significant educational research has emerged supporting the benefits of block scheduling and the successful implementation and maintenance of block scheduling throughout the country is well-documented. In fact, it could be maintained that block scheduling is the most significant re-

Note: Revisions, changes, and additions to the original proposal presented to the School Board on October 12, 2005 are underlined in this document. Also, other additions based on suggestions from the November 15 School Board Meeting are indicated in blue.

structuring and school improvement strategy that high schools have experienced in the history of high schools in our nation. Instead of being an alternate way of structuring the school day, block scheduling has become the norm in many states. In Virginia, 75 percent of the high schools use some form of block scheduling. In addition to the reported direct benefits for students, it establishes new possibilities for new and better ways for teachers to work together. With twenty-five percent of the teachers sharing a common planning time at any point during the school day, the establishment of a true culture of professional learning becomes a possibility. This kind of embedded professional learning always results in improved student achievement. All of the schools that are nationally recognized for closing the achievement gap have an established culture of professional learning within their schools.

Based on the findings from research studies during the year of planning conducted in the three high schools, these schools decided to change to block scheduling because of the following benefits:

- Students would have greater opportunity to take more courses and more options within the program (e.g. - more students could take AP courses, dual enrollment, and various electives).
- The needs of students could be better accommodated (e.g. some students could accelerate through the high school program by taking more rigorous academic courses in successive semesters, while students who fail courses can repeat them the next semester thereby staying on-track with his/her cohort to graduate in four years).
- The high school would become more personalized as teachers would have a fewer number of students each semester allowing them to give more individualized attention.
- With 90 minute classes, students would have more opportunities to engage in student-centered learning activities that require them to be active learners, instead of less effective teacher-centered instruction.
- Because of less activity in the halls and common areas in the school building during the school day due to fewer class changes, an improvement in school climate should be the result of improved student behavior. Concomitantly, student attendance should increase since students will realize that more content is covered each day.
- Due to more collaborative planning time, teachers should feel a greater sense of effectiveness and empowerment.

In summary, more opportunities, more flexibility, improvements in the school climate, better student-teacher interaction, and more effective instruction are the positive outcomes expected as a result of changing to block scheduling. The research clearly substantiates that each of these expected outcomes are correlates for indicators of student achievement such as more students taking higher-level courses, more students graduating, and higher standardized test results. This evaluation plan which focuses on the 2005-06 implementation of block scheduling will analyze separately each of these reasons for changing the scheduling format. The primary purpose of this evaluation is to determine to what degree the expected positive outcomes were realized during the first three years of implementation of the hybrid block scheduling format.

In addition, the review of student achievement as measured by test results will be a significant aspect of this evaluation. While higher student achievement as measured by test results has not been the principal catalyst for the scheduling change, a complimentary purpose of this evaluation is to analyze specific student academic measures (i.e. - SOL end-of-course results, SAT scores, advanced placement results and graduation rates), including analyzing subgroup data (i.e.- socio-economic status, demographics, and students with disabilities). In the context of the No Child Left Behind federal legislation, each school is accountable for its' student achievement test results every year. As a result, data will be available to compare student achievement test results of all the high schools in our division, both the block and the non-block schools.

Finally, an ancillary purpose will be to analyze some administrative practices related to the scheduling of students. Because of concerns related to retention of learning, SOL test results of students who have a two semester lapse in time between sequential academic courses will be compared with other students who have not had such a lapse in time. It will take two years to make this comparison in the block schools. Other scheduling practices associated with transfer students will be analyzed. For these transfer students, the number of courses that our hybrid block schools were not able to accommodate will be reported. A comparison will be made between the block and non-block schools during the 2005-06 school year to determine if transfer students in block schools have less or more incidences of not being able to provide the same courses that the students were enrolled in in their previous schools. In addition, in order to gauge the impact of the hybrid block schedule on students who exit the school division. a survey form (with a self-addressed stamped envelope) will be sent with the parent and student which they will mail back to the central office after entering the new school. On the form they will indicate the ability of the new school to accommodate the courses that the student had under the hybrid block. A comparison will be made between the block and non-block schools during the 2005-06 school year to determine if differences occur.

Evaluation Methods:

The Executive Director of Instruction and his staff will examine the following variables to determine the outcomes, results and effects of the hybrid block scheduling format:

- 1. Student academic success will be compared by analyzing the following indicators: SOL end-of-course test results, SAT scores, advanced placement results, credits earned, grade promotion rates, graduation rates, and the percentage of students entering two- and four-year colleges. A specific student achievement focus will be the percentage of students scoring at the highly proficient level on SOL end-of -course tests in the years 2004-05 and 2005-06 in the block schools. In addition, each of the NCLB subgroups will be compared.
- 2. Academic opportunities including course offerings and course enrollment. The enrollment in advanced placement courses will be a focus.
- 3. In order to determine if there are any negative effects for students who may be scheduled in sequential academic courses with a two semester lapse in time, the SOL end-of-course tests results of these students will be compared with other students who are scheduled in sequential academic courses with less than a two semester lapse in time. (This data will not be available until the fall of 2007 and may be immaterial because the school administrations would have mechanisms in place to prevent a two semester lapse from occurring in any significant numbers.)
- 4. Analysis of the degree of course accommodation for students transferring in to our schools. In order to determine the degree to which students transferring in to our schools are able to receive the same courses as they had in their previous schools, each counselor will keep records listing the student's name and the courses which the school was not able to accommodate or transfer. A comparison will be made between the hybrid block schools and the non-block schools. An "accommodation index" will be computed for both block and non-block schools.
- 5. Analysis of the ability of other schools to accommodate courses from the hybrid block for students transferring from our schools. In order to gauge the impact of the hybrid block schedule on students who exit the school division, a survey form (with a self-addressed stamped envelope) will be sent with the parent and student which they will mail back to the central office after entering the new school. On the form they will indicate the ability of the new school to accommodate the courses that the student had under the hybrid block. A comparison will be made between the block and non-block schools during the 2005-06 school year to determine if differences occur.
- 6. Student behavioral success will be compared by examining attendance, suspension rates, and discipline referrals.
- 7. Analysis of specific quality standards (i.e. teacher daily course enrollment load, number of teacher preparations per semester, and class size averages).

- 8. General satisfaction will be determined through surveying administrators, teachers, students, and parents.
- 9. The quality of classroom instruction will be measured through a best practices audit in which a team of central office curriculum specialists will conduct classroom observations.
- 10. An analysis will be made of the degree of professional collaboration within the staffs at each school. Survey data will be used to determine teachers' perceptions about the level of collaboration.

The evaluation design consists of the collection of data from a variety of departments and data sources including the student information management system under the auspices of the Department of Technology (i.e. - student enrollment, course enrollments, grades, credits earned, promotion rates, graduation rates, suspension rates, discipline referrals, attendance data, and state and national test results). Other data will be collected from the schools. The Executive Director of Accountability will work closely with this evaluation to ensure that all the analyses are conducted with validity and reliability. The survey instruments will be completed by administrators, teachers, students, and parents. The objective of the survey is to give substantial feedback regarding the relative merits of the block schedule versus the traditional schedule regarding academic opportunities, student-teacher interaction, school climate, student behavior, instructional quality, and overall satisfaction. Statistical tests for differences and levels of significance are not possible with the survey results since a true scientific research design is not the purpose of this evaluation.

Limitations:

There are certain limitations that will be inherent in the evaluation of the 2005-06 hybrid block scheduling format. Some complicating factors exist. First, because of redistricting of students at the beginning of the 2005-06 school year, a comparison of achievement data from the previous year must be considered with some caution because of changes in the student populations at each of the schools. Second, since Mountain View High School is in its first year, there will be no data available to make a comparison to the traditional schedule. Third, the first year of any innovative program may provide irregular results due to implementation challenges. Classes 90 minutes in length are a totally new experience for teachers and students. Even with explicit training and support for changes in classroom instruction methodology in the planning year and during the implementation year, it would be unfair to assess the impact of such a major instructional innovation based on an evaluation of the first year alone. Successfully implementing a major change generally takes several years. While a formative evaluation for the 2005-06 school year can be reported in the fall of 2006, it is recommended that the evaluation of the hybrid block scheduling format should be extended to include a summative evaluation after three years.

<u>Interim</u> Evaluative Reports, Accountability and Involvement:

Even though there are some precautions that must be considered when attributing outcomes to the implementation of block scheduling, it is necessary to employ evaluative measures not only because accountability requires it but also because improvements will not be possible unless data is used as a guide; therefore, formative evaluation will be a key aspect of the total evaluation process. In addition to the formative evaluation that will be reported to the Board of Education in the fall of 2006, interim updates on the evaluation process will be made during the 2005-06 school year. Sometime after the end of the first semester, it would be reasonable to make some preliminary first semester comparisons between block scheduling and the traditional schedule from the previous year. For example, course enrollments, courses offered, attendance data, and suspension data can be compared. Since school would have been in session the same number of days, this would be an essentially equivalent comparison. It would also make sense to compare passing rates at the end of first nine weeks under the block schedule for semester length courses with passing rates at the end of the first semester last year under the traditional schedule.

In addition to the School Board, some other groups will be asked to be involved in the evaluation of the implementation of block scheduling. In each of the schools, the principals will establish a school advisory council that will be charged with focusing on student achievement and school improvement including curriculum program goals and priorities. The evaluation of block scheduling will be only one responsibility of the school advisory council. The school advisory council will consist of the principal as chairman; and teacher, parent, and/or business representatives. The principals may use or adapt some existing school group that includes some parent members to serve as the school advisory council.

The school advisory council will appoint a block scheduling study group for the purpose of reviewing information, data, and results that are provided by the block scheduling evaluation process. The study group's only responsibility will be associated with the evaluation of the implementation of the hybrid block scheduling format. The study group will include six members including one teacher, three parents, one student., and one member of the school advisory council (excluding the principal). In addition to these eighteen participants, five at-large participants will be selected to join the process. The at-large participants will include the following: a middle school parent, a middle school teacher, a parent from each of the non-block schools, and a community member. A process for selecting the at-large participants will be developed by the School Board and Superintendent. The Executive Director of Instruction and the Executive Director of Accountability will meet with the study groups and the atlarge participants to provide evaluative data and to provide assistance in

understanding the results. In addition, these twenty-three participants will work together to develop the teacher, student, and parent survey instruments, as well as the administration of these surveys and the interpretation of the results. The study groups will report back to the schools' principals and the school advisory councils from time to time.

Formative and Summative Evaluations:

Since comprehensive, complete data for the 2005-06 school year will not be available until September 2006, a summative evaluation report focused on the 2005-06 implementation of the hybrid block scheduling format can not be made until October 2006. Three categories of data will be used in this evaluation. First, there will be some data that represents correlates of student achievement. Second, other data will represent student achievement measures. Third, other data will be analyzed associated with scheduling administrative practices. These three categories of data include the following measures:

STUDENT ACHIEVEMENT CORRELATES

- Number and percentage of students in advanced placement, dual enrollment, and various electives in 2005-08 compared to 2004-05 in the block schools, and to 2005-08 in the non-block schools.
- Number and percentage of survey responses on the student, teacher, and parent surveys that indicate the teacher-student relationship is more personalized in 2005-08 compared to 2004-05 in the block schools and to 2005-08 in the non-block schools.
- Number and percentage of students on teacher rolls each semester in 2005-08 compared to 2004-05 in the block schools and to 2005-08 in the non-block schools.
- The average class size in 2005-08 compared to 2004-05 in the block schools and to 2005-08 in the non-block schools.
- Based on the best practices audit in each school, the use of studentcentered instructional activities in the block schools will be reported along with the teacher responses to a survey item related to their use of studentcentered activities.
- Attendance rates in 2005-08 compared to 2004-05 in the block schools and to 2005-08 in the non-block schools.
- Suspension rates in 2005-08 compared to 2004-05 in the block schools and to 2005-08 in the non-block schools.
- Number and percentage of discipline referrals in 2005-08 compared to 2004-5 in the block schools and to 2005-08 in the non-block schools.
- Number of survey responses on the teacher survey that indicate that the degree of collaboration is greater in 2005-08 compared to 2004-05 in the block schools

STUDENT ACHIEVEMENT MEASURES

- Student achievement results on SOL tests in 2005-08 compared to 2004-05 in the block schools and to 2005-08 in the non-block schools. Also, a specific comparison will be made between SOL test results of hybrid block students who do not have academic courses in sequential semesters with students taking year-long courses in the non-block schools.
- Student achievement results on Advanced Placement tests in 2005-08
 compared to 2004-05 in the block schools and to 2005-08 in the non-block
 schools.
- Student achievement results on the SAT in 2005-08 compared to 2004-05 in the block schools and to 2005-08 in the non-block schools.
- The percentage of students scoring at the highly proficient level on SOL end-of -course tests in 2005-08 compared to 2004-05 in the block schools and to 2005-08 in the non-block schools.
- The graduation rates in 2005-08 compared to 2004-05 in the block schools and to 2005-08 in the non-block schools.
- The promotion rates in 2005-08 compared to 2004-05 in the block schools and to 2005-08 in the non-block schools.

ADMINISTRATIVE SCHEDULING PRACTICES

- SOL test results of students who have had a two semester lapse in time between sequential academic courses will be compared with other students who have not had such a lapse in time. It will take two years to make this comparison in the block schools.
- For transfer students entering our schools, the number of courses that the schools were not able to accommodate will be reported. A comparison will be made between the block and non-block schools during the 2005-06 school year.
- For transfer students leaving our schools, an attempt will be made to gather data related to the number of courses that the new school was not able to accommodate. A survey form (with a self-addressed stamped envelope) will be sent with the parent and student which they will mail back to the central office after entering the new school. On the form they will indicate the ability of the new school to accommodate the courses that the student had under the hybrid block. A comparison will be made between the block and non-block schools during the 2005-06 school year to determine if differences occur.

In conclusion, more opportunities, more flexibility, improvements in the school climate, better student-teacher interaction, and more effective instruction are the positive outcomes expected as a result of changing to the hybrid block schedule. The primary purpose of this evaluation is to determine the extent to which these expected outcomes are realized. In addition, a complimentary objective is to compare student achievement data as measured by graduation rates, promotion rates, and standardized tests. Another objective is to determine the effects of student scheduling practices. A formative evaluation will be made in the fall of

2006 and 2007 with the summative evaluation being presented to the School Board and Superintendent in the fall of 2008.

EVALUATION DESIGN

STUDENT ACHIEVEMENT CORRELATES OR EXPECTED OUTCOMES	EVALUATION MEASURES	TIMELINE			
Students would have greater opportunity to take more courses and more options within the program (e.g more students could take AP courses, dual enrollment, and various electives).	hin the program information database and				
The needs of students could be better accommodated (e.g some students could accelerate through the high school program by taking more rigorous academic courses in successive semesters, while students who fail courses can repeat them the next semester thereby staying on-track with his/her cohort to graduate in four years).	 Comparative analysis of course enrollments (2005-08 block v. 2004-05 traditional) Comparative analysis of promotion and graduation rates (2005-08 block v. 2004-05 traditional, and 2005-08 in the non-block schools) 	Winter 2006Fall 2006Fall 2007Fall 2008			
The high school would become more personalized as teachers would have a fewer number of students each semester allowing them to give more individualized attention.	ners would have a fewer number of seach semester allowing them to give • Comparative analysis of daily course enrollment load for				
With 90 minute classes, students would have more opportunities to engage in student-centered learning activities, instead of less effective teacher-centered instruction.	 Analysis of best practices audit Analysis of online survey results Comparative analysis of number of teacher preparations each semester (2005-08 block v. 2004-05 traditional, and 2005-08 in the non-block schools) 	Fall 2006Fall 2007Fall 2008			
Because of less activity in the halls and common areas in the school building during the school day due to fewer class changes, an improvement in school climate should be the result of improved student behavior. Concomitantly, student attendance should increase since students will realize that more content is covered each day.	Comparative analysis of attendance, suspension rates and discipline referrals (2005-08 block v. 2004-05 traditional, and 2005-08 in the non-block schools)	Fall 2006Fall 2007Fall 2008			
Due to more collaborative planning time, teachers should feel a greater sense of effectiveness and empowerment.	Analysis of online survey results (2005-08 block v. 2004-05 traditional, and 2005-08 in the non-block schools)	Fall 2006Fall 2007Fall 2008			

EVALUATION DESIGN

STUDENT ACHIEVEMENT MEASURES	EVALUATION MEASURES	TIMELINE
Student achievement results on SOL tests	Comparative analysis of SOL results using NCLB subgroups (2005-08 block v. 2004-05 traditional, and 2005-08 block v. non-block schools). Also, hybrid block students with a semester lapse in sequential courses with non-block students with year-long courses (2005-08 block v. non-block schools)	 Fall 2006 Fall 2007 Fall 2008
Student achievement results on AP test	Comparative analysis of AP (2005-08 block v. 2004-05 traditional, and 2005-08 block v. non-block schools)	 Fall 2006 Fall 2007 Fall 2008
Student achievement results on SAT test	Comparative analysis of SAT (2005-08 block v. 2004-05 traditional, and 2005-08 block v. non-block)	Fall 2006Fall 2007Fall 2008
The percentage of students scoring at the highly proficient level on SOL end-of -course tests	Comparative analysis of highly proficient SOL results (2005-08 block v. 2004-05 traditional, and 2005-08 block v. non-block)	Fall 2006Fall 2007Fall 2008
Graduation rates	Comparative analysis of graduation rates (2005-08 block v. 2004-05 traditional, and 2005- 08 block v. non-block)	 Fall 2006 Fall 2007 Fall 2008
Promotion rates	Comparative analysis of promotion rates (2005-08 block v. 2004-05 traditional, and 2005-08 block v. non-block)	 Fall 2006 Fall 2007 Fall 2008

EVALUATION DESIGN

ADMINISTRATIVE SCHEDULING PRACTICES	EVALUATION MEASURES	TIMELINE
SOL test results of students who have had a two semester lapse in time between sequential academic courses and other students who have not had such a lapse in time	Comparative analysis of SOL test scores of students with two semester lapse in time between sequential academic courses and other students who have had less that a two semester lapse (2005-07, and 08 within block school comparison)	• Fall 2007 • Fall 2008
For transfer students, the number of courses that the block schools and non-block schools were not able to accommodate to determine if block schools have a higher rate of not being able to give transfer students the same courses as they had in their previous schools	Comparative analysis of number of courses that transfer students were not able to keep from their previous schools (block v. non-block schools)	 Fall 2006 Fall 2007 Fall 2008
In order to gauge the impact of the hybrid block schedule on students who exit the school division, a survey form (with a self-addressed stamped envelope) will be sent with the parent and student which they will mail back to the central office after entering the new school. On the form they will indicate the ability of the new school to accommodate the courses that the student had under the hybrid block. A comparison will be made between the block and non-block schools during the 2005-06 school year to determine if differences occur.	Comparative analysis of number of courses that the new school was not able to schedule for the students transferring from the hybrid block schools. (block v. non-block schools)	 Fall 2006 Fall 2007 Fall 2008

EXAMPLE DRAFT

Teacher Opinions: Hybrid Block Schedule Implementation

Please circle whether you "strongly agree" (SA), "agree" (A), "no change" (N), "disagree" (D), "strongly disagree" (SD) or "no opinion" (0) with the statements below.

When I compare the block schedule to the traditional seven-period day. I find that ...

- SAANDSD0 1. Block scheduling has allowed me to increase my use of a variety of instructional practices. SAANDSD0 2. Block classes provide enough time for each individual student to learn. SAANDSD0 3. Block scheduling has allowed me to increase individualization of instruction. SAANDSD0 4. Block classes allow me to complete the learning cycle in an individual class section. SAANDSD0 5. Block classes reduce time lost to instruction. SAANDSD0 6. Block scheduling has improved student attendance. Block scheduling has decreased the dropout rate. SAANDSD0 7. SAANDSD0 8. Block scheduling has reduced discipline incidents. SAANDSD0 9. Block scheduling has improved student grades. SAANDSD0 10. Block scheduling has improved AP scores.
- SAANDSD0 Block scheduling has increased dual enrollment. 11.
- SAANDSD0 12. Block scheduling has reduced my daily preparations.
- Block scheduling has reduced the number of students I work with daily. SAANDSD0 13.
- Block scheduling has increased the number of classes I teach annually. SAANDSD0 14.
- SAANDSD0 15. Block scheduling has reduced student homework loads.
- 16. SAANDSD0 Block scheduling has increased the number of credits students earn.
- SAANDSD0 17. Block scheduling has increased the opportunity for students to re-take failed courses.
- SA A N D SD 0 18. In-service on active learning strategies is very important for proper implementation of block scheduling.
- SAANDSD0 19. Block scheduling has decreased student/teacher ratios.
- SAANDSD0 20. Block scheduling has had a negative impact on student learning in sequential classes such as foreign language and math.
- SAANDSD0 21. Block scheduling has had a negative impact on visual and performing arts classes (music, art, drama).
- SAANDSD0 22. Block scheduling has increased the problems associated with transfer students.
- SA A N D SD 0 23. Block scheduling has made it harder for students to complete make-up work.
- SAANDSD0 24. Block scheduling reduces rates of student retention of information.
- SAANDSD0 25. Block scheduling has led to an increase in student boredom.
- SAANDSD0 26. Block scheduling has increased the problems associated with the use of substitute teachers.
- SAANDSD0 27. Block scheduling has helped students focus more on earning credits

28. 29.	towards graduation. My instruction has improved as a result of block scheduling. Block scheduling has improved student learning.
31.	I prefer block scheduling to the traditional seven period day. Block scheduling has improved the quality of student/teacher relationships.
32.	The BEST thing about block scheduling compared to the traditional seven-period schedule is:
33.	The WORST thing about block scheduling compared to the traditional seven-period schedule is:
34.	Are there issues concerning the impact of the block schedule on the school which are not reflected in this survey? If so, what are they?
	29. 30. 31. 32.